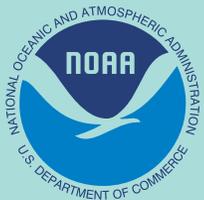


02/20/24

UNIVERSITY OF FLORIDA WATER INSTITUTE SYMPOSIUM



Challenges and successes of community science: Perspectives from multiple programs in the Southeast



Shelly Krueger

Florida Sea Grant Extension Agent

UF/IFAS Monroe County, Key West, FL

shellykrueger@ufl.edu

Southeast Community Science Programs

- Georgia Adopt-A-Stream and Coastal Georgia Adopt-A-Wetland
- UF/IFAS Water Watch (Florida Keys Water Watch)
- UF/IFAS Stony Coral Tissue Loss Disease Underwater Observer
- Florida Horseshoe Crab Watch
- Great Goliath Grouper Count
- Florida Microplastics Awareness Program
- South Atlantic Fishery Management Council Cit Sci
- NOAA Phytoplankton Monitoring Network
- And of course – LAKEWATCH!

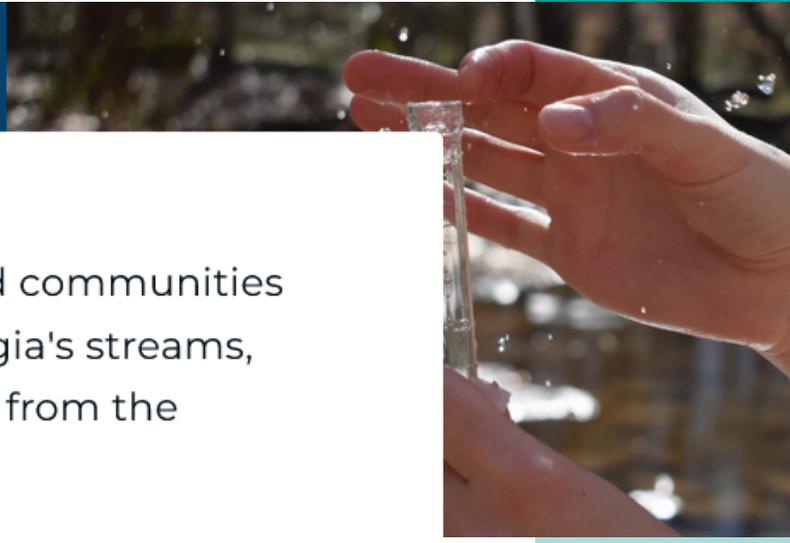




ENVIRONMENTAL PROTECTION DIVISION

Georgia Adopt-A-Stream

We encourage individuals and communities to monitor and improve Georgia's streams, wetlands, lakes, and estuaries from the mountains to the coast.



Adopt-A-Wetland

The coastal Georgia Adopt-A-Wetland Program is a hands-on education program that promotes wetland conservation through volunteer monitoring.



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Volunteer Opportunities

- ▶ Adopt-A-Wetland

- Oyster Restoration Project

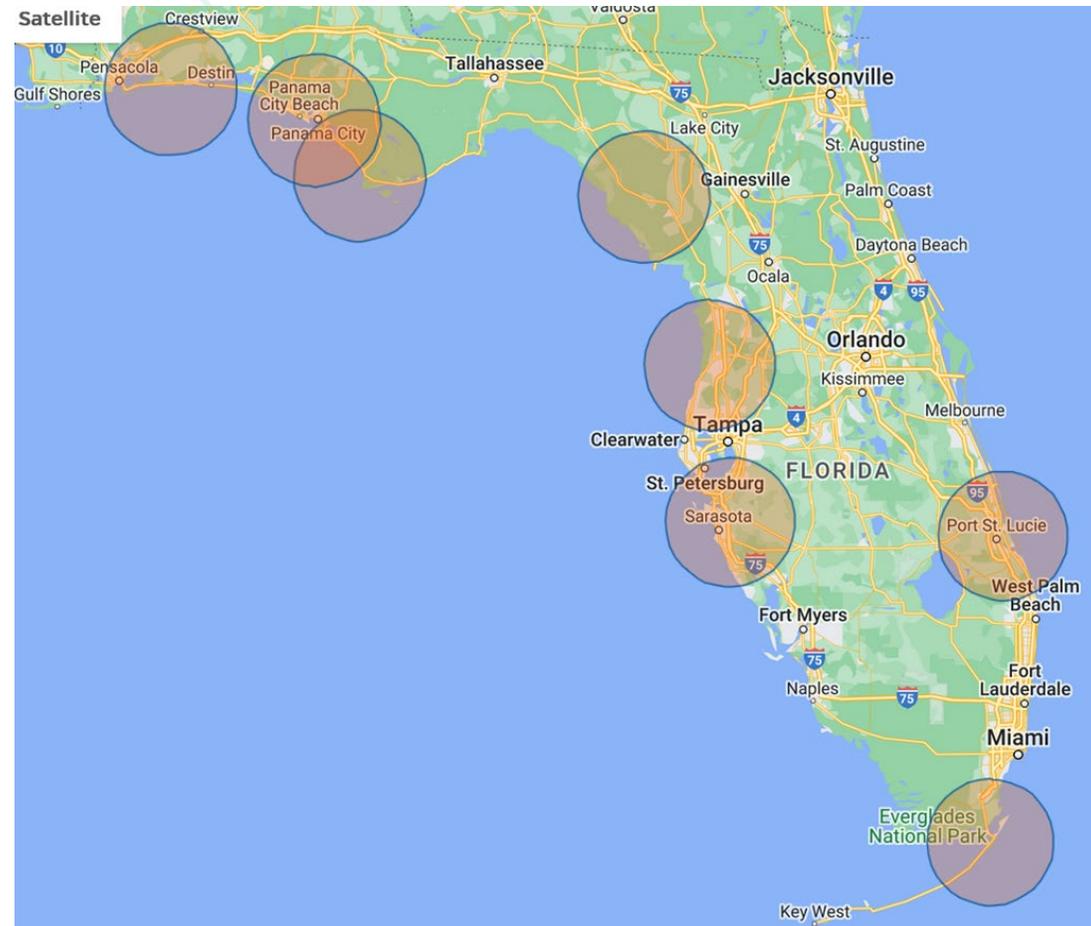
- Phytoplankton Monitoring Network

- UGA Aquarium Volunteer

UF/IFAS Florida Water Watch

- Independently managed by FSG Extension agents
- Designed to meet water monitoring needs of individual communities while maintaining statewide identity and integrity

- 8 coastal programs
- Shared SOPs
- QA/QC
- MOU w/ GA AAS
- LAKEWATCH



UF/IFAS Stony Coral Tissue Loss Disease Underwater Observers

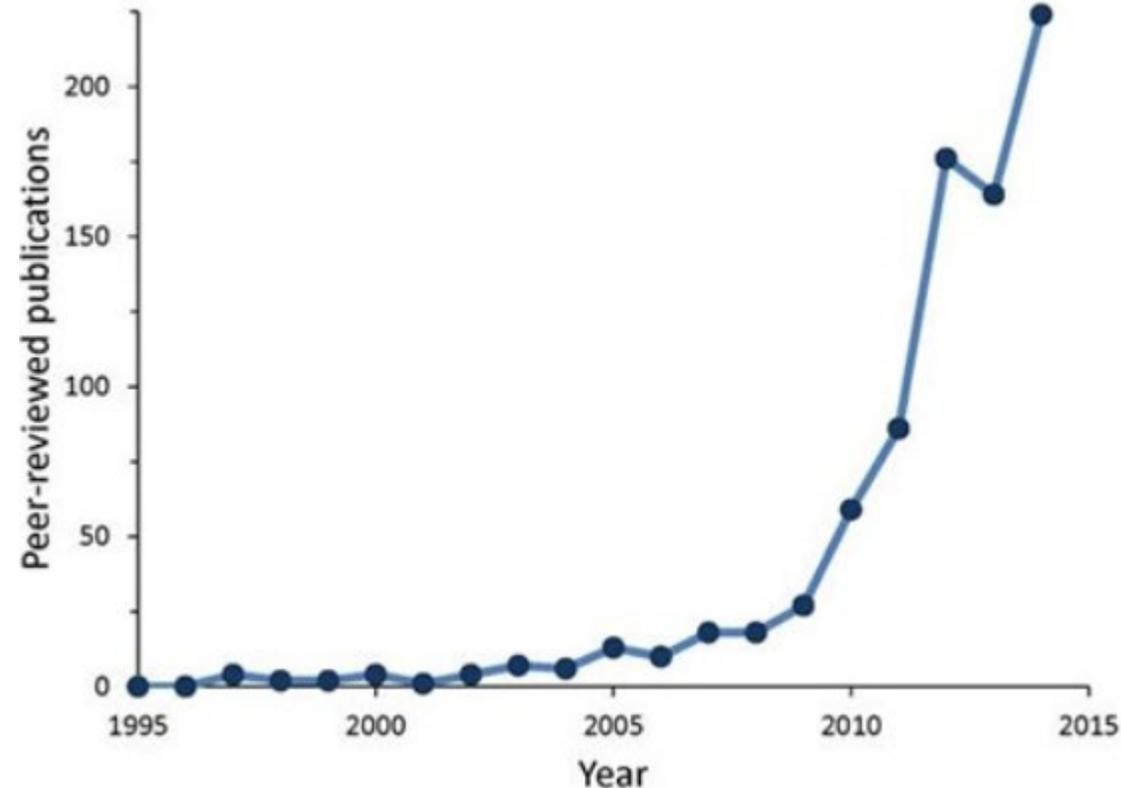
- 2014 – SCTLD identified Port of Miami
- FDEP increase disease surveillance
- Volunteer reports @ FDEP SEAFAN.net
- 2021: Endemic in all FL's Coral Reef
- Caribbean cooperation
- Evolve: recovery monitoring!



Crowdsourcing and Citizen Science Act (2016)



- 1° educational value
- Build social capital, trust & transparency
- Efficient, cost-effective
- Zero pubs (1995) to 250+ (2015)
- Hoyer et al. (2014) Florida LAKEWATCH: citizen scientists protecting Florida's aquatic systems. Florida Scientist 77:184-197



Results for a search of the Web of Science for keyword "citizen science" (McKinley et al. 2015)

Successful Program Attributes



- Goal 1: Program implementation designed to sustain a framework that guides long-term data collection, 5+ years
 - GA-AAS/AAW, Great Goliath Grouper Count, FL Horseshoe Crab Watch, LAKEWATCH...
- Goal 2: Ensure volunteer data are accessible and statistically robust
Manage expectations! (LAKEWATCH pubs!)
- Goal 3: Foster mutual learning, collaboration, engagement, and responsiveness!
- Goal 4: Individual projects to address specific short-term research priorities or surveillance (stony coral tissue loss disease, invasives)
AND EVOLVE to monitor recovery, removal, reemergence etc.

Lessons Learned

- Grant funding typically < 3 years
- Building relationships is key and takes time – maintain connections during grant \$\$ ebbs and flows
- Volunteer retention
 - Loss of interest & burnout
 - Repetitive data, “negative data,” declining trends
- How is my data being used?
 - Policy development? Problem identification?
 - Am I just collecting data for no reason?
- Community science is a powerful tool; involve end users and volunteers early and often!
- Leverage learning from other community science projects!





Engaging Diverse Audiences

- Free Time! Volunteer activities that coincide with other recreational activities increases likelihood of ongoing commitment
 - SCUBA, beach-walking, kayak, boating, fishing, birding
- Even when training and tools provided, still a cost involved
 - Time, transportation, recertification
- Ease of Access
 - 😊 Easy to access from home
 - ☹️ Boats, SCUBA training, transportation to beaches/coast



Acknowledgements

- US EPA Region 4 Water Division, South Florida Program
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- Contact: ShellyKrueger@UFL.edu